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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LIN, KELVIN Y

ART UNIT PAPER NUMBER

2142

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/002,744

Applicant(s)

UENO, TOSHIO

Examiner

Kelvin Lin

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/17/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Detailed Action

Response to Amended Specification

1. Amended to the specification is accepted.

Response to Arguments

2. The Applicant's argument with respect to claims 1-14 have been considered but are not persuasive. Examiner appreciates detail description of prior art.
3. In response to applicant's argument that "Neumann does not disclose, teach or suggest a technical support system (or program or method) in which a knowledge base is search based on product information which includes at least a product model and an identification of a problem and which is input as claim content"

The Office respectfully disagrees.

4. Neumann discloses that the Dialog Manager receives user's input from the User Interface Agent and returns the system's response. And the user or system can take the initiative in issuing directive or asking questions (Neumann, col.16, l.11-15), which corresponds to the portal section provides web pages as information input and output interface.

Neumann further discloses that regarding to the user type or says "... looking for a product model with an identified problem.. ", the User Interface Agent sends the request to Dm. The DM ask the NL agent to parse the user input and return a logical form (LF). The NL agent identifies the language of the request, parse the request to generate a language independent LF, and returns LF. Upon receiving the LF, the DM

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translate it into an interpretation, taking the state of the dialog into account (Neumann, col.16, l.23-45), which corresponds to the search said knowledge base for solution which match a claim content input to a client web page in a format substantially similar to natural language and converts synonymous term into standard term.

Neumann further discloses that the DM interleaves several different type of knowledge, one of them is knowledge of user interface and presentation of information. The Dm is neutral as o domain and task and works with any task that includes all queries about wine, baseball, etc. The DM will determine what the task is and then determine the proper domain to complete the task (Neumann, col.18, l.14-62), which corresponds to the derived solution based on the extracted items of claim definition information.

5. Therefore, amended claim 1 is rejected. Similarly, claims 9 and 12 are rejected accordingly, based on the reason mentioned above.

Response to Amended Claims

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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1. Claims 1-14 are rejected under 35 USC 102(e)
as being anticipated by Neumann et al., (US Patent 6735592).
2. Regarding claim 1, Neumann teaches a technical support system comprising:
 - a service information portal section which provides web pages as an information input and output interfaces (Neumann, col.14, l.8-11, col.15, l.38-40, col.16, l.11-15);
 - a knowledge base section which stores various claim reports and solutions which correspond to the claim reports and which are provided by engineers (Neumann, col. 5, l.66-67, col. 6, l.1-2, col.18, l.65-67, in which electrical components in a circuit design program corresponds to the provided by engineers); and
 - a claim handling section which searches said knowledge base section for solutions which match a claim content input to a client web page (Neumann, col.16, l.1-2, col.18, l.7-36);
wherein said claim handling section is configured to perform an ordinary search of collecting the claim reports from said knowledge base section based on product information , which includes at least a product model and a identification of a problem and which is input as the claim content (Neumann, col.17, l.7-9. col.18, l.30-36), and an extended search of (i) extracting predetermined items of claim definition information each in a standard term from claim details input as the claim content in a format substantially similar to natural

language (Neumann, col.16, l.23-45), by referring to at least one synonym table which converts synonymous terms having a same technical meaning into the standard term and (ii) then deriving a reduced number of solution candidates, based on a combination of extracted items of the claim definition information, from the claim reports obtained in the ordinary search (Neumann, col.23, l.33-46).

3. Regarding claim 2, Neumann further discloses the technical support system according to claim 1, wherein said claim handling section is configured to check a missing item of the product information based on the extracted items of claim definition information, and to fill in the missing item of the product information with the standard term for the corresponding item of claim definition information (Neumann, Table.1,item 6, col.13, l.24-26).
4. Regarding claim 3, Neumann further discloses the technical support system according to claim 2, wherein said claim handling section is configured to check an error item of the product information based on the extracted items of claim definition information, and requires confirmation s to whether or not the product information is correct, when the claim definition information is inconsistent with the product information (Neumann, col.14, l.42-67).
5. Regarding claim 4, Neumann further discloses the technical support system according to claim 1, wherein said claim handling section is configured to check an error item of the product information based on the extracted items of claim

definition information , and requires confirmation as to whether the product information is correct, when the claim definition information is inconsistent with the product information (Neumann, col.13, l.22, col.19, l.2-3, col.27, l.1-3) .

6. Regarding claim 5, Neumann further discloses the technical support system according to claim 1, wherein said claim handling section includes a synonym table which is referred to in the extended search to convert synonymous terms indicative of a problem into a single standard term (Neumann, col.18, l.41-43, col.20, l.48-49, col.23, 32-46).
7. Regarding claim 6, Neumann further discloses the technical support system according to claim 1, wherein said at least one synonym table comprises a synonym table which is referred to in the extended search to convert synonymous terms indicative of a unit corresponding to a problem occurring position into a single standard term (Neumann, col.23, l.34-36).
8. Regarding claim 7, Neumann further discloses the technical support system according to claim 1, wherein said at least one synonym table comprises a synonym table which is referred to in the extended search to convert synonymous terms indicative of a cause of a problem into a single standard term (Neumann, col.23, l.34-36).
9. Regarding claim 8, Neumann further discloses the technical support system according to claim 1, wherein said at least one synonym table comprises a synonym table which is referred to in the extended search shown to convert synonymous terms indicative of a treatment for a problem into a single standard

term (Neumann, col.23, l.34-36).

10. Regarding claims 9-11 have similar limitations as claims 1-3.

Therefore, Claims 9-11 are rejected for the same reasons set forth in the rejection of claims 1-3.

11. Regarding claim 12, Neumann further discloses a technical support method using a knowledge base section which stores various claim reports and solutions which correspond to the claim reports and which are provided by engineers, said method comprising:

- Performing an ordinary search by collecting claim reports (Neumann col.17, l.7-9);
- extracting predetermined items of claim definition information, each in a standard term, from claim details input as claim content in a format substantially similar to natural language by referring to at least one synonym table which converts synonymous terms having a same technical meaning into the standard term (Neumann, Table.1, item 6, col.13, l.24-26, col.17, l.8-9, col.23, l.34-36); and
- performing an extended search by deriving a reduced number of solution candidates, based on a combination of the extracted items of claim definition information, from the claim reports obtained in the ordinary search (Neumann, col.12, l.11-14, col.23, l.33-46).

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12. Regarding claim 13, Neumann further discloses a technical support method according to claim 12, further comprising:
- checking a missing item of the product information based on the extracted items of claim definition information (Neumann, col.13, l.24-26). and
 - filling in the missing item of the product information with the standard term for the corresponding item of claim definition information (Neumann, Table.1,item 6)
13. Regarding claim 14, Neumann further discloses the technical support method according to claim 12, further comprising:
- checking for an error item of the product information based on the extracted items of claim definition information (Neumann, col.16, l.30-40 col.23, l.34-36,); and
 - requiring confirmation as to whether the product information is correct when the claim definition information is inconsistent with the product information (Neumann, col.16, l.48-67).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first replay is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE MONTH shortened statutory period, then the shortened statutory period will expire on the date advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTH from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelvin Lin whose telephone number is 571-272-3898. The examiner can normally be reached on Flexible 4/9/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09/15/05
KYL


KAMINI SHAH
PRIMARY EXAMINER

Response to Office Action
Application Serial No. 10/002,744
Annotated Sheet Showing Changes



Unit (J)	Unit (E)
U01 給紙ユニット	U01 Paper feeder unit
U02 オプション給紙ユニット	U02 LCF/PFU/PFP
U03 光学/レーザーユニット	U03 Optional/Laser Unit
U04 ドラム	U04 Drum
U05 チャージャー/グリッド	U05 Charger/Grid
U06 現像器ユニット	U06 Developer unit
U07 トナー/カートリッジ	U07 Toner/Cartridge
U08 クリーナーユニット	U08 Cleaner unit
U09 プロセスユニット全般	U09 Process unit in overall
U10 機体内用紙搬送ユニット	U10 Paper transport unit
U11 定着器ユニット	U11 Fuser unit
U12 排紙ユニット	U12 Exit unit
U13 ADD	U13 ADD
U14 ADF	U14 ADF
U15 ソーター/フィニッシャー	U15 Sorter/Finisher
U16 ドライブユニット	U16 Drive Unit
U17 コンパネユニット	U17 Control Panel unit
U18 PC板、その他電気部品	U18 PWA or other electrical circuit
U19 電源ユニット/高圧トランス	U19 Power supply unit/HVT
U20 HDD/拡張メモリー	U20 HDD/Expansion memory
U21 ネットワークコントローラー	U21 Network controller
U22 FAX/NCUボード	U22 FAX/NCU board
U23 本体ファームウェア	U23 Firmware in machine
U24 ドライバーソフトウェア	U24 Driver software
U25 ネットワーク環境	U25 Network environment
U26 外装カバー	U26 Exterior covers
U27 梱包箱	U27 Packaging
U28 その他	U28 Others

Expansion

FIG. 8

Response to Office Action
Application Serial No. 10/002,744
Replacement Sheet

Unit (J)	Unit (E)
U01 給紙ユニット	U01 Paper feeder unit
U02 オプション給紙ユニット	U02 LCF/PFU/PFP
U03 光学/レーザーユニット	U03 Optional/Laser Unit
U04 ドラム	U04 Drum
U05 チャージャー/グリッド	U05 Charger/Grid
U06 現像器ユニット	U06 Developer unit
U07 トナー/カートリッジ	U07 Toner/Cartridge
U08 クリーナーユニット	U08 Cleaner unit
U09 プロセスユニット全般	U09 Process unit in overall
U10 機体内用紙搬送ユニット	U10 Paper transport unit
U11 定着器ユニット	U11 Fuser unit
U12 排紙ユニット	U12 Exit unit
U13 ADD	U13 ADD
U14 ADF	U14 ADF
U15 ソーター/フィニッシャー	U15 Sorter/Finisher
U16 ドライブユニット	U16 Drive Unit
U17 コンパネユニット	U17 Control Panel unit
U18 PC板、その他電気部品	U18 PWA or other electrical circuit
U19 電源ユニット/高圧トランス	U19 Power supply unit/HVT
U20 HDD/拡張メモリー	U20 HDD/Expansion memory
U21 ネットワークコントローラー	U21 Network controller
U22 FAX/NCUボード	U22 FAX/NCU board
U23 本体ファームウェア	U23 Firmware in machine
U24 ドライバーソフトウェア	U24 Driver software
U25 ネットワーク環境	U25 Network environment
U26 外装カバー	U26 Exterior covers
U27 梱包箱	U27 Packaging
U28 その他	U28 Others

FIG. 8